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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/616,528

07/10/2003

Andrew Z. Glovatsky

10541-1847

1225

29074

7590

04/13/2006

EXAMINER

WRIGHT, INGRID D

VISTEON

C/O BRINKS HOFER GILSON & LIONE

PO BOX 10395

CHICAGO, IL 60610

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,528

Applicant(s)

GLOVATSKY ET AL. 

Examiner

Ingrid Wright

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-11 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: Attached fig. 6A & 6C.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/9/06 has been entered.

2. The objection of claim 1, regarding improper format for amending, is withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 10 & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al. US 5204806 in view of Williams US 4756644.

Note: See attached fig. 6A & 6C of Sasaki et al. for unlabeled elements representing the limitations claimed in the instant application.

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With respect to claim 1, Sasaki et al. teaches a microelectronic package comprising: a housing including a cylindrical wall (1) (see, fig. 6A) defining a central axis (center point along line B-B), the cylindrical wall having an outer surface and inner surface, a compartment (s) between the inner surface and the central axis. The inner surface of the wall forms an assembly support surface for a microelectronic assembly (3). The support surface of the inner wall faces the central axis. A microelectronic assembly is fixed to the support surface via projections (8) (see, also col. 4, lines 61-65 of Sasaki et al.).

Sasaki et al. is fails to show at least one axial channel interposed between the inner and outer surfaces of a wall.

Williams teaches (see, fig. 5 & 2) at least one axial channel (13,34) interposed between the inner and outer surfaces of a wall of a housing (10) and a flange (28) respectively.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the axial channels as taught by Williams et al., in the invention of Sasaki et al., in order to provide a means of expelling air and to effectively cool the apparatus (see, col. 6, lines 42-53).

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With respect to claim 2, Sasaki et al. teaches, in the embodiment of fig. 6A, a cylindrical wall comprising an outer surface, which is concentric and an inner surface which is also concentric.

In the embodiment of fig. 6C, Sasaki et al. teaches a cylindrical wall comprising a non-concentric inner surface.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the non-concentric inner surface of the embodiment of fig. 6C over the concentric inner surface of embodiment of fig. 6A of Sasaki et al., in order to provide an alternate equivalent means of providing a support surface for a flexible circuit board within a tubular or polygonal casing (see, col. 1, lines 28-34 of Sasaki et al.).

With respect to claim 3, Sasaki et al. teaches (see, fig. 6C) a support surface that is planar.

With respect to claim 4, Sasaki et al. teaches wherein the inner surface comprises first and second assembly support surfaces are planar (see, for example, fig. 6C), wherein the microelectronic package comprises a first microelectronic assembly affixed to the first assembly support surface, a second microelectronic assembly affixed to the

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second assembly support surface, and a flexible interconnect connecting the first microelectronic and second microelectronic assembly (see, fig. 7 of Sasaki et al.).

With respect to claim 5, Williams et al. teaches (fig. 5) a channel (5) through the housing (10), which is adapted for conveying cooling gas (air) through the housing (10).

With respect to claim 10, Sasaki et al. teaches a housing (2) received in a tubular casing (1).

With respect to claim 11, Sasaki et al. teaches (fig. 1A, 4) a support surface, which is a curve having a radius of curvature less than the radius of the outer wall (1).

4. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al. US 5204806 in view of Williams US 4756644, further in view of Cloud et al. US 5884000.

With respect to claim 6, in regards to all the limitations of claim 1 above, Sasaki et al. as modified by Williams, teaches the housing with a cylindrical wall (1), but is silent as to the housing comprising a first section having first axial edges and a second section having second axial edges joined to the first axial edges.

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Cloud et al. teaches (see, fig. 1) a housing (22), which comprising a first section (12) having first axial edges and a second section (14) having second axial edges joined to the first axial edges (see, col. 4, lines 20-24).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to divide the housing of Sasaki into first and second section, in order to provide a semi-cylindrical outer wall configuration and easy access and repairability of electronic components (see, col. 1, lines 26-29 of Cloud et al.).

With respect to claim 7, Cloud et al. teaches wherein a first section (12), comprises a semi-cylindrical wall (22) and second section (14) comprises a semi-cylindrical wall (22).

With respect to claims 8 & 9, even though the claims are limited by and defined by the recited process, (i.e. process of forming), the determination of the patentability of the product is based on the product itself, and does not depend on its method of production. If the product is the product-by-process claim is the same as or obvious form a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In the instant case Sasaki et al. is silent as to the method of production.

Response to Arguments

5. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

In response to Applicant's arguments that the references fail to show certain features of the Applicant's invention, it is noted that Sasaki et al. is relied upon to teach an inner wall, which is a support surface that faces the central axis (axis along line B-B). The electronic assembly (3) is fixed to the support surface via projections (8). A central compartment (5) is between an inner surface (see, attached fig. 6A) and the central axis (axis along line B-B). (see, attached fig. 6A & col. 4, lines 61-65 of Sasaki et al.). Williams et al. is relied upon to teach cooling channels. Thus, Sasaki et al., in view of Williams, teaches the limitations of the instant application regarding claims 1,4,5 & 11.

In regards to the Applicant's Arguments regarding claims 6 & 7, Sasaki et al., as modified by Williams, is silent as to a housing comprising first and second sections, which comprises axial edges and a semi-cylindrical wall. Cloud et al. is relied upon to teach first and second sections, with axial edges and a semi-cylindrical wall. Thus, Sasaki et al. in view of Williams, further in view of Cloud et al., teaches all the limitations of claims 6, 7,10 & 11.

In regards to the Applicant's arguments regarding the Landgestell reference, it is noted that the arguments are moot in view of the new grounds of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Green et al. US 5586004, Schwartz US 5568356, US 5857974 shows the state of the general art regarding microelectronic assemblies in cylindrical housings and flexible interconnections.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ingrid Wright whose telephone number is (571)272-8392. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571)272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IDW



LYNN FEILD
SUPERVISORY PATENT EXAMINER

FIG. 6(C)

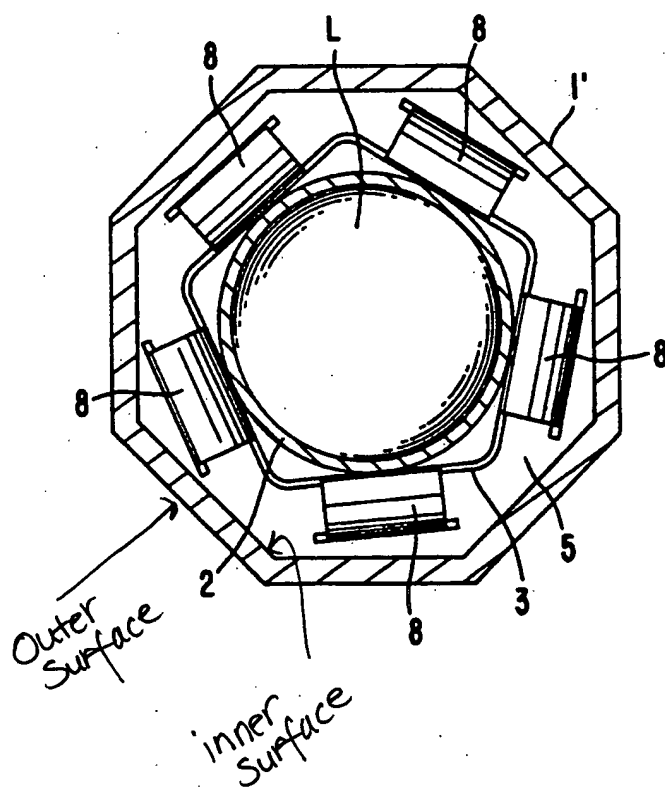


FIG. 6(A)

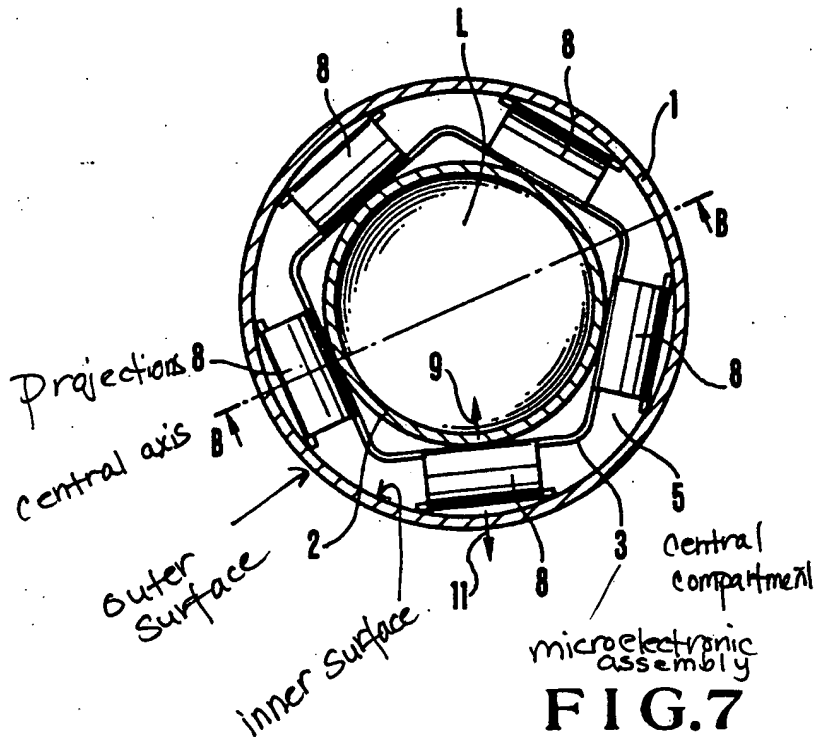


FIG. 6(B)

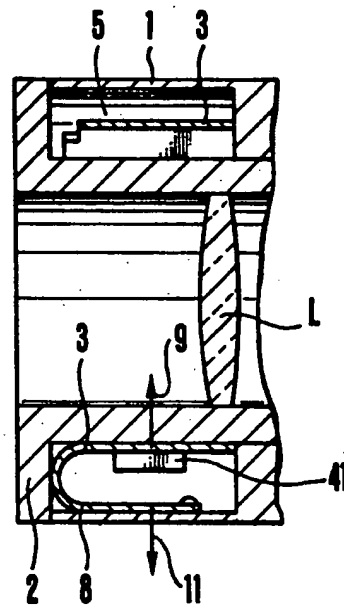


FIG. 7

